IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An apparatus, including:

a modulator having a clock input including a duty cycle to be modulated by an analog message signal, the modulator to provide a modulated carrier with a monotonically-increasing fundamental frequency component to a switching amplifier,

wherein the clock input is used to initiate charging and discharging of a capacitor.

2. (Original) The apparatus of claim 1, wherein the duty cycle is limited to less than about 50%.

3. (Original) The apparatus of claim 1, wherein the clock input includes a frequency of about 500 MHz to about 100 GHz..

4. (Canceled)

5. (Currently Amended) The apparatus of claim [[4]]1, wherein a rate of discharge of the capacitor is controlled by the analog message signal.

6. (Original) The apparatus of claim 1, wherein the analog message signal includes a plurality of quadrature amplitude modulated symbols.

7. (Currently Amended) An apparatus, including:

a duty cycle modulator to raise and lower the mean value of a sinusoidal signal according to a level of an analog message signal to provide a modulated signal with a monotonically-increasing fundamental frequency component to a switching amplifier, wherein the modulator has a clock input including a duty cycle to be modulated by the analog message signal, and the clock input is used to initiate charging and discharging of a capacitor.

8. (Original) The apparatus of claim 7, wherein the duty cycle is limited to less than about 50%.

9. (Original) The apparatus of claim 7, wherein the analog message signal includes quadrature amplitude modulated symbols.

10. (Currently Amended) A system, including:

a modulator having a clock input including a duty cycle to be modulated by an analog message signal, the modulator to provide a modulated carrier with a monotonically-increasing fundamental frequency component, wherein the clock input is used to initiate charging and discharging of a capacitor; and

a switching power amplifier to receive the modulated carrier and coupled to the modulator.

11. (Original) The system of claim 10, further including:

a monopole antenna to couple to the switching power amplifier.

12. (Currently Amended) The system of claim 10, wherein the switching power amplifier ~~amplifer~~ is selected from a group consisting of a class D amplifier, a class E amplifier, and a class S amplifier.

13. (Original) The system of claim 10, further including:

a driver to directly couple the modulator to the switching power amplifier.

14. (Original) The system of claim 10, further including:

a digital-to-analog converter to provide the analog message signal.

15. (Currently Amended) A method, including:

adjusting a duty cycle of a switching amplifier input by changing an amplitude of an analog message signal to provide a modulated carrier having a monotonically-increasing fundamental frequency component; and

pre-distorting a quadrature amplitude modulation (QAM) signal included in the analog message signal to compensate non-linearity associated with the switching amplifier.

16. (Original) The method of claim 15, wherein adjusting the duty cycle further includes: limiting the duty cycle to less than about 50%.

17. (Original) The method of claim 15, wherein the amplitude of the analog message signal changes according to a multiple carrier communication technique.

18. (Original) The method of claim 17, wherein the multiple carrier communication technique includes an orthogonal frequency division multiplexing (OFDM) process.

19. (Canceled)

20. (Currently Amended) ~~The method of claim 15, further including:~~ A method, including:

adjusting a duty cycle of a switching amplifier input by changing an amplitude of an analog message signal to provide a modulated carrier having a monotonically-increasing fundamental frequency component; and

pre-distorting an orthogonal frequency division multiplexed signal included in the analog message signal to compensate non-linearity associated with the switching amplifier.

21. (Currently Amended) An article comprising a machine-accessible medium having associated information, wherein the information, when accessed, results in a machine performing:

adjusting a duty cycle of a switching amplifier input by changing an amplitude of an analog message signal to provide a modulated carrier having a monotonically-increasing

fundamental frequency component; and

pre-distorting a quadrature amplitude modulation (QAM) signal included in the analog message signal to compensate non-linearity associated with the switching.

22. (Original) The article of claim 21, wherein adjusting the duty cycle further includes: limiting the duty cycle to less than about 50%.

23. (Canceled)

24. (Currently Amended) ~~The article of claim 24, wherein the analog message signal includes an orthogonal frequency division multiplexed (OFDM) signal, and wherein the information, when accessed, results in the machine performing:~~ An article comprising a machine-accessible medium having associated information, wherein the information, when accessed, results in a machine performing:

adjusting a duty cycle of a switching amplifier input by changing an amplitude of an analog message signal to provide a modulated carrier having a monotonically-increasing fundamental frequency component;

pre-distorting the OFDM signal included in the analog message signal to compensate non-linearity associated with the switching amplifier.